

REMARKS

Claims 9, 12, 15, 18, and 20 have been amended and claims 1-20 are pending in the present application. The claim amendments and new claims are supported by the specification and claims as originally filed, with no new matter being added. In particular, support for the amendments and new claims can be found throughout the application as filed, for example at page 13, lines 14-24 and in Figure 5, as well as in revised Figure 8. Accordingly, favorable reconsideration of the pending claims is respectfully requested.

1. Objections to the Claims and the Drawings

Claims 5, 8, 9, 12, 15, and 20 have been objected to for reciting various limitations the Office Action states are not in the drawings. In addition, the drawings have been objected to under 37 C.F.R. 1.83(a) because various elements recited in claims 5, 8, 9, 12, 15, and 20 are allegedly not shown in the drawings. More particularly, the Office Action states that the drawings do not show, “a field emission device/flat panel display device comprising: a substrate; a cathode conductive layer disposed over the substrate; and an emitter tip formed from an emitter layer disposed over the cathode conductive layer.” Office Action, p. 3.

In response, Applicant has submitted herewith a substitute new drawing sheet 6 to explicitly illustrate a separate substrate, cathode conductive layer, and emitter layer with integral emitter tip. Applicant therefore respectfully requests that the objection to claims 5, 8, 9, 12, 15, and 20 and the objection to the drawings be withdrawn.

2. Rejections Under the Judicially Created Doctrine of Double Patenting

Claims 1-8 and 18-19 have been rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-8 of U.S. Patent No. 6,175,184 B1 in view of U.S. Patent No. 5,663,608 to Jones et al. for the reasons set forth on pages 4-5 of the Office Action.

This rejection will be addressed when the Examiner indicates the allowable subject matter.

3. Rejections Under 35 U.S.C. § 102(b)

Claims 9, 10, 12, 13, 15, 16, 18, and 20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,663,608 to Jones, *et al.*, (hereinafter “*Jones*”) for the reasons set forth on pages 3-5 of the Office Action. Applicant respectfully traverses.

Present claim 9 now recites, among other things, “an emitter layer disposed over said cathode conductive layer and comprising a base plane.” Present claims 12, 18, and 20 now recite, among other things, “said emitter layer comprising a base plane.” Present claim 15 now recites, among other things, “a single emitter layer disposed over said cathode conductive layer and comprising a base plane.” Accordingly, each of the independent claims 9, 12, 15, 18, and 20 has been amended to recite, with some variations, that the emitter layer comprises the base plane. *See* Figure 8. In addition, claims 9, 12, 15, 18, and 20 have also been amended to remove any recitation that the emitter tip comprises the base plane. This amendment is made to clarify the manner in which the presently claimed emitter tips of claims 9-20 arise from the base plane of the emitter layer as opposed to a hypothetical plane that is above the base plane of the emitter layer but below the apex of the emitter tip. Thus, the claimed embodiments of the invention have features similar to, for example, a continuously concave exterior surface extending from the base plane of the emitter layer to the apex. *See e.g.* Claim 9.

In contrast, *Jones* discloses emitter tips that have a columnar, cylindrical main body portion (see column 9, lines 53-55) with an upper tip portion having a “generally convergent character and having in the embodiment shown concave side wall geometry” (see column 9, lines 56-59). Applicants therefore respectfully submit that the Examiner’s interpretation of *Jones*’ Figure 40 (see Office Action, p. 6) cannot teach or suggest the presently claimed structures. Namely, the markings on Figure 40 in the Office Action (page 6) show a described “base plane” that is raised above the emitter layer. Hence, the emitter layer cannot comprise the base plane. In addition, it can be noted that the line described in the Office Action as a “base plane” is more aptly described as an intermediate plane with the base plane being on a level with the base of the cylindrical main body portion.

Accordingly, Applicant respectfully asserts that claims 9, 12, 15, 18, and 20 are not anticipated by *Jones*. Claims 10, 13, 16 depend from a respective one of claims 9, 12 and 15 and are patentable over *Jones* for at least the reasons presented hereinabove with respect to claims 9, 12, 15, 18, and 20. Applicant therefore respectfully requests that the rejection of these claims under 35 U.S.C. § 102 be withdrawn.

4. Rejections Under 35 U.S.C. § 103(a)

Claims 11, 14, and 17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jones* for the reasons set forth on page 7 of the Office Action. Applicant respectfully traverses.

Claims 11, 14, and 17 depend from a respective one of claims 9, 12 and 15 and are patentable for at least the reasons presented hereinabove with respect to those claims. Accordingly, claims 11, 14, and 17 would not have been obvious over the cited references and Applicant therefore respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the foregoing, Applicant respectfully requests favorable reconsideration and allowance of the present claims. In the event the Examiner finds any remaining impediment to the prompt allowance of this application which could be clarified by a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney.

Dated this 27th day of October 2003.

Respectfully submitted,



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Attachments

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